RECOMMENDED VACCINATION SCHEDULE FOR ADULTS

	Month 0	Month 1	Month 6
Hepatitis A vaccine*#	•		•
Hepatitis B vaccine†‡	•	•	•
Hepatitis A and B combination vaccine±	•	•	•

- * Vaccination begun with hepatitis A vaccine from one manufacturer may be completed with hepatitis A vaccine from another manufacturer. 3,8
- # Havrix®1440 EL.U./1.0 mL or Vaqta® 50 U/1.0 mL given intramuscularly in the deltoid muscle.
- † Engerix-B[®] 20 mcg/1.0 mL or Recombivax[®] HB 10 mcg/1.0 mL given intramuscularly in the deltoid muscle.
- ‡ For hemodialysis patients, Engerix-B®: two 20 mcg/1.0 mL injections or Recombivax® HB 40g/1.0 mL given at 0, 1, 2 and 6 months, intramuscularly in the deltoid muscle.
- ± Combination Havrix® 720 EL.U. and Engerix-B® 20 mcg vaccine (1mL) given intramuscularly in the deltoid muscle.

NONRESPONDERS¹⁻⁹

In immunocompromised patients and in hemodialysis patients, serologic testing may be necessary to determine antibody response and additional booster doses of hepatitis A and/or hepatitis B vaccine or restarting the vaccination series may be needed.

REFERENCES

- CDC. Prevention of hepatitis A through active or passive immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48 (RR12):1-42.
- Havrix[®] (hepatitis A vaccine, inactivated) package insert. Philadelphia, PA; SmithKline Beecham; 2001.
- Vaqta® (hepatitis A vaccine, inactivated) package insert. West Point, PA; Merck & Co., Inc; 2001.
- CDC. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination: Recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991;40 (RR13):1-25.
- Engerix-B[®] (hepatitis B vaccine, recombinant) package insert. Philadelphia. PA; SmithKline Beecham; 2001.
- Recombivax HB[®] (hepatitis B vaccine, recombinant) package insert. Whitehouse Station, NJ; Merck & Co., Inc; 2002.
- Twinrix® (hepatitis A inactivated and hepatitis B recombinan vaccine) package insert. Philadelphia, PA; SmithKline Beecham; 2001.
- 8. Centers for Disease Control and Prevention. Recommendations and Reports: hepatitis A and B vaccines. MMW 2003;52 (RR01): 34-36.
- Centers for Disease Control and Prevention. Recommendations for Preventing Transmission of Infections Among Chronic Hemodialysis Patients. MMWR 2001;50(RR05): 20-36.





VACCINATION AGAINST HEPATITIS A & B

A Summary of Current Recommendations

Veterans Health Administration National Hepatitis C Program and Hepatitis C Resource Centers



For further information, consult the VA hepatitis C website at http://www.va.gov/hepatitisC/ and the NIH Consensus Statement at http://consensus.nih.gov/

MODES OF VIRAL TRANSMISSION

- Hepatitis A Virus (HAV): by the fecal-oral route through close person-to-person contact or ingestion of contaminated food and water.
- Hepatitis B Virus (HBV): through blood or other body fluids.

VACCINES FOR HEPATITIS A AND B

Hepatitis A: Two inactivated vaccines Hepatitis B: Two recombinant vaccines Hepatitis A and B: One combination vaccine

- Administer the combination vaccine to patients who lack immunity to both infections and who belong to risk groups for both infections (see table on Who To Vaccinate).
- Administer either hepatitis A or B vaccine to patients who lack immunity to, and are at risk for, one virus but not the other (see table on Who To Vaccinate).

WHO TO VACCINATE FOR HEPATITIS A AND/OR HEPATITIS B¹⁻⁶

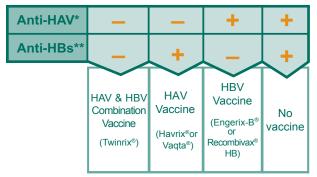
- Patients without prior immunity to hepatitis A or B
 (i.e. anti-HAV or anti-HBs and anti-HBc negative)
 who fall into one or more of the following groups
 as listed in table on Who To Vaccinate.
- Patients without an allergy to any component of the hepatitis A or B vaccine or to yeast with the hepatitis B vaccine.



WHY VACCINATE HEPATITIS C PATIENTS FOR HEPATITIS A AND B?

- Patients coinfected with hepatitis C virus (HCV) and HAV or HBV are at increased risk for severe liver disease.
- Patients with HCV may be at increased risk for acquiring HBV.
- Vaccination against hepatitis A and B is beneficial in patients with chronic liver disease.
 However, responses are better in patients with early compared to advanced disease.

VACCINATION APPROACH BASED ON SEROLOGY



- * Anti-HAV: antibodies to hepatitis A antigen, either IgG or total (IgG plus IgM)
- ** Anti-HBs: antibody to hepatitis B surface antigen

Note: A positive anti-HBc (antibody to hepatitis B core antigen) in the absence of anti-HBs may not indicate immunity, and recommendations for vaccinations in this situation are not available.